Gulf of Mexico Harmful Algal Bloom Bulletin

11 September 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: September 7, 2006

Conditions Report

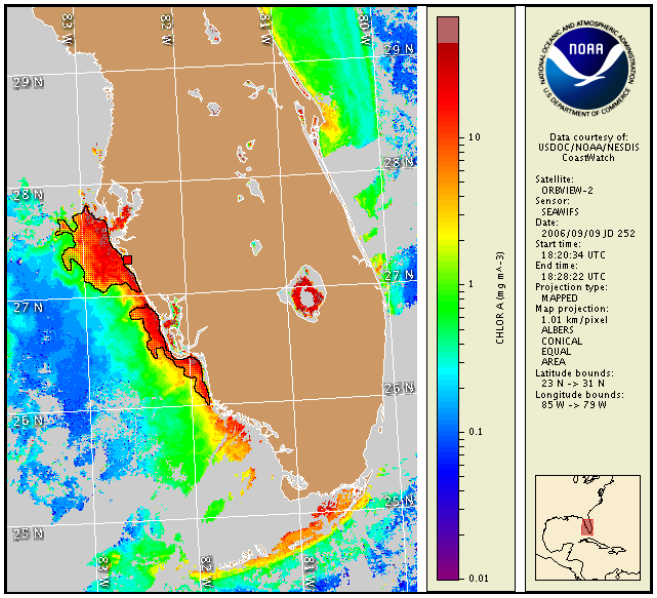
A harmful algal bloom has been identified from southern Pinellas to northern Collier Counties. Patchy moderate impacts are possible today, patchy very low impacts are possible tonight through Tuesday, and patchy moderate impacts are possible Wednesday and Thursday for southern Pinellas, Manatee, Charlotte, and northern Lee Counties. Patchy high impacts are possible today, patchy low impacts are possible tonight through Tuesday, and patchy high impacts are possible Wednesday and Thursday for Sarasota County. Patchy moderate impacts are expected today through Thursday for the Pine Island Sound San Carlos Bay Region. No impacts are expected in southern Lee County. In northern Collier County patchy low impacts are possible today, patchy very low impacts are possible tonight through Tuesday, and patchy low impacts are possible Wednesday and Thursday.

Analysis

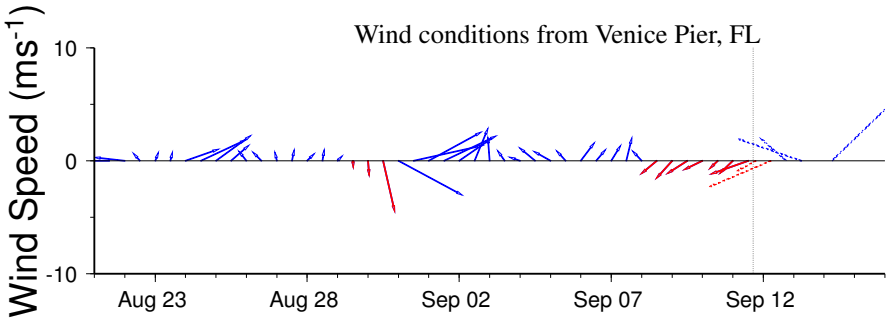
The harmful algal bloom persists from southern Pinellas County to northern Collier County. Imagery (9/9) indicates that the bloom extends from at least as far north as 27°50'15''N 82°58'27''W (cloud cover limits view of northern extent) to northern Collier County. Pockets of high chlorophyll (>30 μg/L) concentrations are in the following locations: 27°43'35''N 82°55'42''W, 27°36'12''N 82°48'41''W, 27°31'49''N 82°48'18''W and 27°12'5''N 82°33'22''W. Samples indicate that *K. brevis* is present at medium-high concentrations at the surface and at low-medium concentrations at the subsurface along Sarasota and Charlotte Counties (FWRI; 9/5-9/6). Also, non-harmful algae is present at medium-high concentrations in samples collected onshore and near-shore from Pinellas to Charlotte Counties (FWRI; 9/6). In southern Lee County samples continue to indicate either not present or present levels of *K. brevis*. In Collier County, concentrations have declined. Two samples taken on 9/5 indicated low a and very low a concentrations in Seagate and South Marco Beach while two new samples (9/7) indicate present and not present concentrations (FWRI). In the past week, there have been many reports of fish kills in Pinellas, Charlotte, and Sarasota counties.

Moderate onshore winds today, Wednesday, and Thursday will increase coastal impacts. No significant intensification is expected. Bloom will maintain location at the coast.

Urizar, Fenstermacher

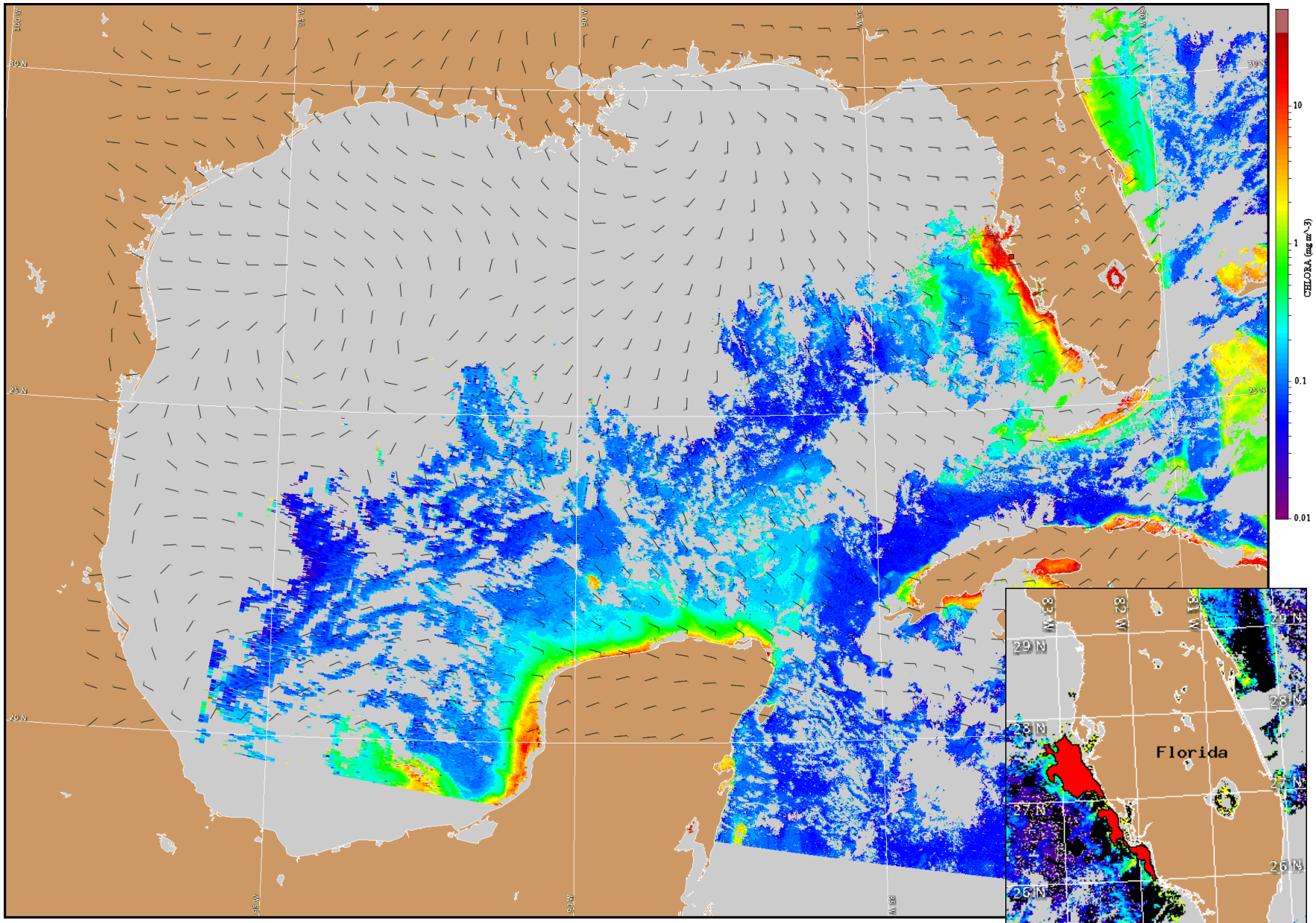


Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 1 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

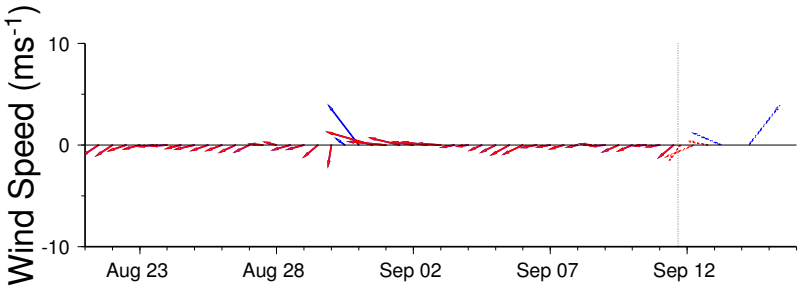
Onshore winds this afternoon becoming easterlies tonight through tomorrow at 10-15 knots (5-8 m/s). Southeasterlies Tuesday night at 10-15 knots (5-8 m/s) and southwesterlies Wednesday and Thursday at 10 knots (5 m/s).



Satellite chlorophyll image and forecast winds for September 12, 2006 12Z with cell concentration sampling data from September 1 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Naples, FL



Wind conditions from Egmont Key, FL